

# Pest Update (April 14, 2010)

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## Available on the net at:

<http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx>

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

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## Plant development for the growing season

We are still ahead of last year as well as many past years, it plant development. The forsythias are just finished blooming and the serviceberries are beginning to flower. Everyone will need to rush to begin or complete some of the most critical cover sprays for diseases such as apple scab before the opportunity passes.

## Treatments to do now



**Apple scab** – The apples and crabapples buds are just beginning to open so now is the time to begin fungicide treatments for apple scab. This is the most common disease of apples and crabapples and a spring infection results in discolored leaves that begin to fall in mid- to late summer. While the damage occurs then, the time to begin treatments is now! The first spray of Captan, a commonly available fungicide, should be applied when the buds are

just beginning to open. Treatments will have to continue on a seven to ten-day interval until the weather begins to dry, usually mid-June. This first spray is the most critical, miss this one and the rest will not matter!



**Tent caterpillars** egg masses are beginning to hatch in eastern South Dakota. While it is still possible to prune out the infestations since the nests are so small and the caterpillars have not migrated out yet. However within the next few days these “worms” will begin to move out and feed on the expanding foliage of cherries, apples and other preferred host. Once the insect begins to feed the treatment options become spraying and this is best accomplished

while the insects are small. The most common available insecticides for controlling this insect are ones that contain carbaryl or malathion as the active ingredient. Carbaryl is commonly sold as Sevin while malathion is sold as Malathion. Remember spraying any fruit tree during flowering will have the undesired affect of also killing any bees that are pollinating the flowers so avoid this time period.



**Zimmerman pine moth** is not just an insect, but a complex of three different species of closely related insects. The three species found in South Dakota are *Dioryctria ponderosae*, *D. tumicolella* and *D. zimmermani*. The first two are generally found West River while the last is found only East River. All three insects are easily identified by the masses of reddish pitch created in response to the burrowing activity of the larvae. Typically the

pitch masses will be found near the branch whorls and infested trees will often have broken branches near these pitch locations as well as deformed tree tops. While the damage is the same, the treatment window differs among the three

due to different life cycles. ***Dioryctria ponderosae* and *D. zimmermani* should be treated with a bark spray during the end of April, now, and again in mid-August.** *Dioryctria ponderosa* is treated the first week of June and again in early July. The most common insecticides for control of this insect contain permethrin as the active ingredient.

## **Black Knot – can you save the tree by pruning?**



Another problem that people frequently try to solve by pruning is black knot, also known as dead man's finger, a very common fungal disease of cherry and plums and shown so well in this picture I received last week from John over in Davison County. These black, coal-like galls that are sometimes covered with a white powder can often be found lining the branches and trunks of plums, chokecherries and Mayday trees. A common

recommendation is to prune out these galls during the winter months, but this activity has very limited value. First, these blackened galls are the *second* year of infection. The shoots initially infected last year have only a slight greenish swelling of the tissue. If these shoots are not removed they will grow to form the blacked masses the following year, as you can see it is hard to get ahead of the disease by pruning. The other problem is only some trees are very susceptible to black knot and once they get the disease you can probably expect the tree to become infected again regardless of your pruning efforts. Basal pruning (cutting the tree down) is probably the best approach if you have one that is covered with the knots.

## **Why are the branches dying on my spruce tree?**



**There are a lot of pests on spruce in our state including scales, mites, needleminers, and several diseases.** One of the most common problems on mature spruces, those more than 20 years old, cytophora canker (*Leucocytospora kunzei*). The symptoms are twig dieback that progresses to branch dieback, most commonly beginning at the base of the tree

and then continuing upward to perhaps half the height of a mature tree. Since the disease does not affect the top of the tree, spruces often survive the disease but their appearance suffers. The best means of identifying the disease is to look back along a branch that is suffering from twig dieback and check for bluish-white resin blisters. Beneath these blisters the branch is often sunken and if the bark is removed may reveal the canker. Unfortunately there is no effective means of

controlling this disease other than maintain the tree's health though watering during our hot, dry summers and prune off infected branches. The infected branches can be removed during periods of dry weather and the pruning saw should be disinfected between cuts by spraying with Lysol Disinfectant.



While blue spruce is the most popular evergreen, its planting should be tempered by the fact that it is prone to a multitude of pest problems, accounting for more samples than any other plant, is not well-adapted to our dry climate and has been overused. I like the way Minnesota Extension *Yard and Garden Line News* (Vol 5, number 15) described problems on spruce; "The most common reason for unhealthy [blue] spruce is the simple fact that

they should never have been planted in Minnesota in the first place." While that may be stretching it, the point is well made and we should be encouraging people to at least consider other evergreens such as the Meyers spruce (*Picea meyeri*), Black Hills spruce (*P. glauca* var. *densata*) and in southeastern South Dakota Serbian spruce (*P. omorika*) and even the Swiss stone pine (*Pinus cembra*).

## **Samples received**

### **Yankton County**

*Is this yellowing due to winter burn or tip blight?*

The yellowing of the expanding new shoots is due to Kabatina, one of the pathogens responsible for juniper blight. While positive identification requires close examination of the fruiting structures, generally Kabatina symptoms occur in April just as the new shoots form and these infected shoots dry and brown by May. Phomopsis symptoms often do not develop until May and may continue until later in the season. The importance of knowing which pathogen is involved is that there are no effective chemical controls for Kabatina while phomopsis can be treated with copper fungicides. Since Kabatina infects only the new shoots plants will usually survive the infection though they may look a little rough!